



# Ø BEAT

COLO. SPRINGS,  
COLORADO

APRIL 1974



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## REPEATER APPLICATIONS SIMPLIFIED

Rules requiring technical data related to amateur radio repeater stations to be filed with the station application have been amended by the Commission. Parameters of antenna height above average terrain and effective radiated power have been changed from application requirements (97.41 (f) to logging requirements (97.111 (f)). The amended rules became effective January 23, 1974.

The Commission said that this revised procedure would benefit applicants since they will no longer need to include data with the applications. Repeater station licensees will no longer be required to submit proposed changes to the Commission before making modifications to their stations.

"The net effect of these amendments will be a reduction in the initial showings required for all repeater station applications, and the elimination of showings with applications for repeater stations

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## PRESIDENT'S NEWS

Russ Ruggieri WBØGKF

First, apologies to anyone who was inconvenienced by the oversight in last month's ZERO BEAT. "Old Timers Night" is scheduled for the April meeting and not as printed in the March issue of the club paper. Please accept my sincerest apology for this bit of confusion. I hope to see a good turn out at the April meeting.

I would like to thank Dan, WØJY for his interesting and informative presentation at the March meeting. I am sure that the information Dan provided will be used to the best advantage concerning possible changes of the repeaters in Colorado. Thanks again, Dan.

In addition to "Old Timers Night" there will be a brief slide presentation by the Pueblo Ham Club. This presentation concerns the 1974 ARRL Rocky Mountain Division Convention. The convention will

(Continued on Page 3)



# ZERO BEAT

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R. Charles Smith, WAØZZS  
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The PPRAA meets at 7:30 P.M. on the second Wednesday of each month in the Security Savings & Loan Building, East Platte at Union Boulevard.

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### MARCH MINUTES - Bob Tate, WBØJTZ

The March meeting of PPRAA was held on March 13, 1974 at the Security Savings and Loan Building, Union at Platte.....Meeting was called to order by the Vice President, Mike Stansberry, WBØHCK at 7:50 PM.....Visitors were asked to introduce themselves.....Treasurers report was given by Dean Jaynes, WAØPJH. Accepted as read.....Minutes of the February meeting, as published in March ZERO BEAT, were accepted..... Pete Demario, KØUDG gave a report on the repeaters. The new repeater, KØNAF remains on the air; however, considerable work still remains to raise it to the quality of the prime repeater, WAØVTV. After installation of a duplexer, KØNAF should be up to full stand-

ard, although it's use is still encouraged. The auto patch should be ready in the near future and will be installed on KØNAF. Reason for installation on KØNAF is to preclude possible mis-use by distant users, since WAØVTV has considerably more coverage than KØNAF. WAØVTV was inoperative for a period of some nine hours on March 11,; however, it was noted that this was the first down time in six months. The malfunction was due to overheating caused by failure of the cooling fans. Two fans were obtained from members to correct the problem, and a request was made for donation of additional spare muffin fans should they be needed to correct a similar

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HIGHER LICENSE FEES

ARRL Official Bulletin No. 469: Despite universal opposition from licensees and the League, FCC this week adopted the higher filing fees for amateurs and most other services which it proposed in Docket 19658 back in 1972. For amateurs the basic fee rises from nine to ten dollars effective May 1. The Commission proposals were summarized on Page 10, February 1973 and the opposition comments by the League on Page 94, May, 1973 QST. Further information will appear in the forthcoming April QST. Date of this bulletin is February 28.

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CB NEWS

United CB'ers of America President George Bennett has been found guilty of 11 counts including fraud and violations of various parts of the U.S. Code, in Detroit, December 21. UCBA has been distributing counterfeit CB licenses according to news reports and is in custody of U.S. Marshall pending sentence.

WESTPARK RADIOPS

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COMPUTER PATROL

Patrol cars in Huntington Beach, California are sent on assignments by a computer in a fraction of the time of the traditional radio call. The \$4000,000 computer enables the dispatcher at the police department to send messages via teleprinters that are installed in squad cars. The officer merely presses a button to acknowledge the message; the entire exchange takes about seven seconds, compared with fifty seconds necessary for a radio voice call.

ASSOCIATED PRESS

PRESIDENT'S NEWS - Continued

be held June 7, 8 and 9th and will be hosted by the Pueblo Ham Club. It appears the convention will be a good one with enough activities and scheduled meetings to please all. A few of the activities planned are: Womens Luncheon, Colorado YI's Meeting, CCRAC Meeting, Airforce MARS Meeting, Childrens Activities, Fast Scan Display, League Officials Meeting, ARRL Forum, Traffic Session, Woulf Hong Ceremonies and RTTY Demonstration.

The convention will be held at the Ramada Inn in Pueblo. There will be a pre-registration drawing for a HP 970A digital voltmeter. More information can be obtained by contacting the Convention Publicity Chairman, Don Mangin, WBØECX. I am looking forward to meeting more of the amateur population of this area at the convention.

I haven't gotten much response for last month's offer of FREE QSL cards promoting the 1976 ARRL convention. These fine QSL cards are free in small quantities to any novice in the area. Send a SASE to: Russ Ruggieri, WBØGKF, 3929 E. San Miguel, #1, Colorado Springs 80909.

Remember, the April meeting will be highlighted by "Old Timers Night". Bring all those relics and memories of what Amateur radio was like. See you at the meeting!

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A POINTER

To say "WØXXX Mobile" is not legal. You must say "WØXXX Mobile zero". Any other identification is not correct.

QST LEAGUE LINES via QSP



WR8ABC REPEATER

To those operating on 2 meter FM, details of repeaters in other parts of the country should be of interest. Here are the facts on the WR8ABC repeater located approximately 15 miles east of downtown Cleveland, Ohio:

Output - 146.76; Mobile Input - 146.16; Base Station Input - 146.355; Effective Radiated Power 400 watts. Normally the input is unguarded and any carrier within 1 1/2 Khz of 146.16 can access the repeater. If one does, and is answered by a station using base input, or any of the access tones, the guard will remain open as long as they talk back and forth. The only way the guard turns on is if the 146.16 input is keyed four times in succession by a signal without an access tone, in one fifteen minute period.

Usually this type of keying is caused by a distant station popping in and out which the guard is designed to prevent. Someone without access tone wanting to use the repeater when the guard is on, can either go in at the end of 15 minutes when the guard goes off or he can whistle the repeater up and ask for help from a station that can keep the access open.

The "four times and out" counter is reset every time an access tone or base input is used, and every fifteen minutes by the timer, so the guard is never on for more than fifteen minutes at the most. Mobile Input, when guarded, can be accessed by: (1) 2000 Hz whistle (fairly high pitch) (2) 2000 Hz tone burst; (3) 110.9 Hz sub audible (4) Touch Tone Pad - 1336 Hz tone burst which can be obtained by simultaneously depressing any two keys in the 2, 5, 8, 0, column. All tones require a duration of one half to three quarters of a second.

450 Mhz Repeater - Output, 447.95;

Input, 449.95. Guarded access - sub audible tone. Autopatch on 2 meters is available 24 hours per day to Club Members and to visitors with emergency traffic. The 2 meter repeater is on the air and monitored 24 hours per day, but from 11:30 PM to 6:30 AM it is restricted to emergency use by autopatch only. The window on the mobile input is 3 1/2 Khz wide and the base input is 5 Khz wide. Club dues are \$12 per year. Name of club is Lake Erie Amateur Radio Association.

WESTPARK RADIOPS

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NEW HAM LICENSES?

It is strongly rumored in Washington circles that very soon the FCC will release a notice of proposed rule making which will establish a new form of amateur radio license structure.

While this is more than possible, it should be pointed out that the FCC has not brought out any proposed rule making and if such is forthcoming, just what it might be is speculation at this point in time.

CCRC CIRCLE

**SIGNAL SYSTEMS**

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GEORGE W/GCH



MARCH MINUTES (Continued)

failure.....Make Stansberry, WBØHCK gave a progress report on field day activities. It is still planned to operate three stations - one CW and two phone. A proposal was made concerning purchase of power distribution cables; however, this was shelved until next meeting as another proposal was made to investigate purchase of surplus military material. Approval, in writing, has been obtained for use of the Black Forest area for field day. Proofs of a handbill to be used for advertising field day activities was shown the membership.....In New Business Ed Pompea, KØZPG raised the issue of distribution for ZERO BEAT. With the recent increase in postal rates, combined with other cost increases in producing ZERO BEAT, it was indicated that some immediate steps would have to be taken to reduce costs. Either an increase in annual club dues, a reduction in mailing class for the publication or some other remedial step will have to be taken. Issue will be decided at next club meeting.....Coffee break at 8:35 PM .....Meeting reconvened at 9:00 PM by the President, Russ Ruggieri WBØGKF.....Drawing was held for door prizes.....Dan Davis, WØJY from Denver addressed the membership. Dan, although a resident of Denver is a member of PPRAA and a very strong supporter of the club. Dan was very deeply thanked for this address, and his attendance and support of our club. The meeting was adjourned at 9:30 PM.

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It is well to remember that when you point a finger at someone you are pointing three at yourself.

OFF RESONANCE via AUTO-CALL

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Display your membership in PPRAA. Our special decals now available at the special price of only 75¢ per sheet.

OSCAR 6 & 7

OSCAR 6 is alive and well - in fact, it's operating schedule has been expanded to include Tuesday, Friday, and Sunday morning, North to South passes. The translator is still turned on during evening (South to North) passes 3 days a week: Wed., Fri., and Sunday, local time.

Be ready for OSCAR 7 - it's launch is still planned for March. It will carry beacons on 2304.1, 145.98, and 29.5, as well as translators for 432.15 to 145.95 and 145.9 to 29.45 (center frequencies). The 70cm-2m translator features both 14W and 2.5W PEP output modes. Both translators will have circularly polarized antennas except the 10m downlink. Get in on operating this most sophisticated satellite package - it should be easier than OSCAR 6 in some modes.

The FOOTPRINT Via CCRCC

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LICENSE EXPIRATION NOTICE

The License Expiration Notice Service will keep track of your license expiration date and will remind you in advance. Note the expiration date on a self-addressed, stamped postcard and send it to Joan Machinchick, K3KBI, 1023 Lake Claire Drive, RFD 4, Annapolis, Maryland 21401

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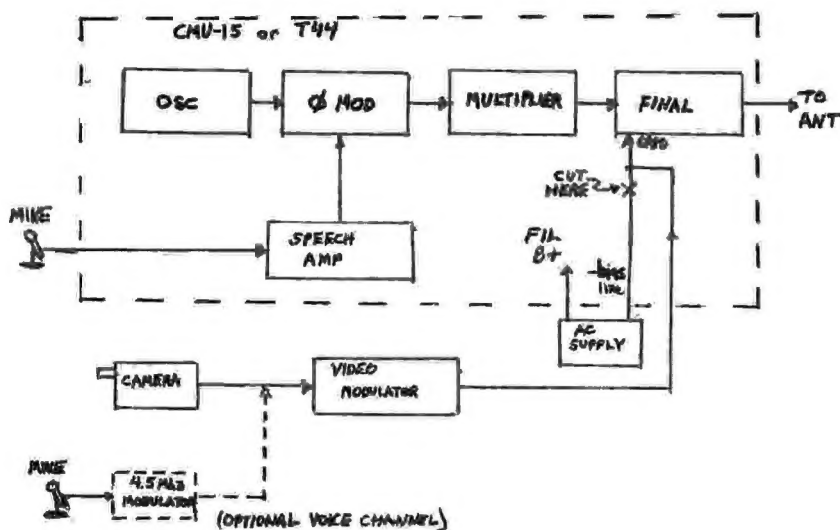
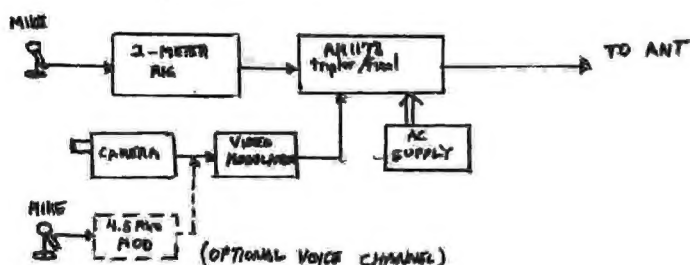
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## DISCOVER AMATEUR TV

Bruce Brown WB4YTU

Here are the ATV transmitter schemes we promised you a couple of months ago.

USING SURPLUS T44 or CMU-15:USING AM1178 or equal tripler/final

Some ATV equipment is pretty hard to find and Metrovision has succeeded in locating the sources for a number of items. Where to buy ATV transmitters:

1. RCA CMU-15 - Available at hamfest and from Gregory Electronics, 246 Rt 46, Saddle Brook, N.J. 07662 \$15 plus \$12 for shipping.
2. Motorola T44 (or U44) - No longer found at surplus stores. Can usually be found at hamfests. Metrovision has recently located two private sources for these units.
3. 439 MHz Transmit crystals for all rigs available from International Crystal, 10 N. Lee, Oklaho-

ma City, Oklahoma 73102. \$7.15 postpaid, .0025% tolerance; specify oven or non-oven type as appropriate.

4. ATV grid modulators - for T44; See February '73 QST or order same fully wired and tested from Spec-tronics, 1009 Garfield St., Oak Park, Ill. 60304 - \$31.50 (PC board = \$5.00, Kit = \$27.50). For CMU-15, See June 1969 73 Magazine or order same fully wired and tested from P.C. Electronics, 2522 Paxson Lane, Arcadia, Calif. 91006 - \$15.00 (PC board - \$3.00). For tripler/amplifiers: Model VM-2 from P.C. Elec. - \$19.50 wired and tested (PC board - \$3.50)

5. 4.5 MHz audio modulators - ATV Research ASC-71 - \$29.95 wired and tested, \$18.95 kit, 13th & Broadway, Dakot City, Neb. 68731 or P.C. Elec. FM-A5 - \$23.50 wired and tested, PC board - \$3.50.

6. AM 1178 - Available from Metrovision, P.O. Box 408, Falls Church, Virginia 22046.

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REPEATER APPLICATION (Continued)

not proposed for remote control or involving auxiliary link stations," the Commission said. The Commission also noted that the amendments will simplify application filing requirements and accelerate application processing and the issuance of licenses, allowing the Commission to eliminate a "substantial backlog in this area."

CCRC CIRCLE

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Altogether too many people are in debt simply because they spend what their friends and neighbors think they make.

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Ideas are like children - none are as wonderful as your own.



FROM THE OTHER END OF THE BANDS

W. G. Morgan, KØHVN

Yes, Virginia, there really is something at the lower frequencies. Have you ever wondered where so many people disappear when the repeater is silent or inactive?

Down on the other end you can find a different world. Down there 10-4 is a time of day, but 10-10 is a group of hams grouped together for a common purpose. Why down there it is even LEGAL to work skip. Down there you call CQ, CQ and NOT "Hey, any of youse guys around?"

There are clubs or awards of all sorts. You can find one for most anything. There are WAS (Worked All States), RCC (Rag Chewers Club), WAC (Worked all Continents) or the DXCC (confirmed 2 way communication with 100 or more countries) to name a few.

Down on 10 meters you may find the 10-10 boys mentioned before or you might even run into one of the Displaced Diathermy Dodgers who are around whenever 10 meters is open. Be sure to look for them on the weekend nearest Ground Hog Day for on this day they gather in mass to hold their annual election of officers with such explicit names as Chief Ground Hog, Supreme Muskrat, Left Shadow, Right Bower and a host of others.

On 80 meters you may even run into

**WANT ADS**

For Sale: GE 4ES12C1 Type ES12C 2 meter tube type FM rig, 25 watts, with cables less speaker and mike, \$25.00. Al Kreibich, Denver, Phone 757-2101 or phone Smitty, WBØLTV at 495-2857 or 472-2475.

Want ads to move equipment or to locate some hard-to-find items are free to any reader of ZERO BEAT. Mail(do not phone) copy to editor.

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and read the mail on a very exclusive club of Extra class ticket holders with 2 letter calls. If you haven't got the proper credentials you won't be able to break in with a California KW. Apparently, the Great White Father in the East does not create us all equal.

If getting involved in emergencies is your bag, you can get involved with the BIG ones. Local hams were involved with traffic handling for the Alaska earthquake and more recently with the Nicaragua quake.

Yes, you can find almost any activity at the other end. You see, Virginia, technicians don't die, they just upgrade their ticket.

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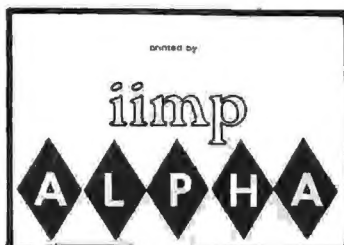
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